

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: MOOSE POND	Lake Area (ha): 15.01
Town: MILLSFIELD	Maximum depth (m): 3.3
County: Coos	Mean depth (m): 0.8
River Basin: Androscoggin	Volume (m ³): 120000
Latitude: 44°43'44" N	Relative depth: 0.8
Longitude: 71°13'48" W	Shore configuration: 1.31
Elevation (ft): 1821	Areal water load (m/yr): 11.57
Shore length (m): 1800	Flushing rate (yr ⁻¹): 14.50
Watershed area (ha): 310.8	P retention coeff.: 0.53
% watershed ponded: 1.0	Lake type: natural

BIOLOGICAL:

		9 February 1994	4 August 1993
DOM. PHYTOPLANKTON (% TOTAL)	#1	MELOSIRA 99%	SPHAEROCYSTIS 30%
	#2		FILAM. BL-GR SPP 20%
	#3		ANABAENA 15%
PHYTOPLANKTON ABUNDANCE (cells/mL)			350
CHLOROPHYLL-A (µg/L)			1.63
DOM. ZOOPLANKTON (% TOTAL)	#1	KELICOTTIA 68%	KELICOTTIA 77%
	#2	KERATELLA 26%	NAUPLIUS LARVA 14%
	#3		
ROTIFERS/LITER		61	254
MICROCRUSTACEA/LITER		4	58
ZOOPLANKTON ABUNDANCE (#/L)		65	312
VASCULAR PLANT ABUNDANCE			Scattered
SECCHI DISK TRANSPARENCY (m)			3.1 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)		7.6	4.5
BACTERIA (E. coli, #/100 ml)	#1		7
	#2		
	#3		

SUMMER THERMAL STRATIFICATION:

weakly stratified

Depth of thermocline (m): None
Hypolimnion volume (m³): None
Anoxic volume (m³): None

CHEMICAL:

Lake: MOOSE POND

Town: MILLSFIELD

	9 February 1994		4 August 1993		
DEPTH (m)	1.0		1.0		2.5
pH (units)	6.3		6.8		6.6
A.N.C. (Alkalinity)	7.7		6.4		6.3
NITRATE NITROGEN	0.17		< 0.02		< 0.02
TOTAL KJELDAHL NITROGEN	0.35		0.45		0.51
TOTAL PHOSPHORUS	0.011		0.018		0.013
CONDUCTIVITY ($\mu\text{mhos/cm}$)	34.7		29.6		30.3
APPARENT COLOR (cpu)	32		43		48
MAGNESIUM			0.69		
CALCIUM			3.0		
SODIUM			1.2		
POTASSIUM			< 0.40		
CHLORIDE	< 2		< 3		< 3
SULFATE	5		5		5
TN : TP	47		25		39
CALCITE SATURATION INDEX			3.2		

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1993

D.O. S.D. PLANT CHL TOTAL CLASS

**	1	1	0	2	Oligo.
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COMMENTS:

1. A.K.A. Little Millsfield Pond.
2. This is a somewhat remote pond accessible by a gated logging road.
3. Moose tracks were very common around the shoreline and it was evident that moose had been feeding on the aquatic plants in the pond. Aquatic plants would probably have been more abundant if the moose weren't present.
4. The wholewater phytoplankton was dominated by Cryptomonas (25%) Chroomonas (20%) and tiny green flagellates (20%).

Moose Pond

Millsfield

N

5 foot depth contours

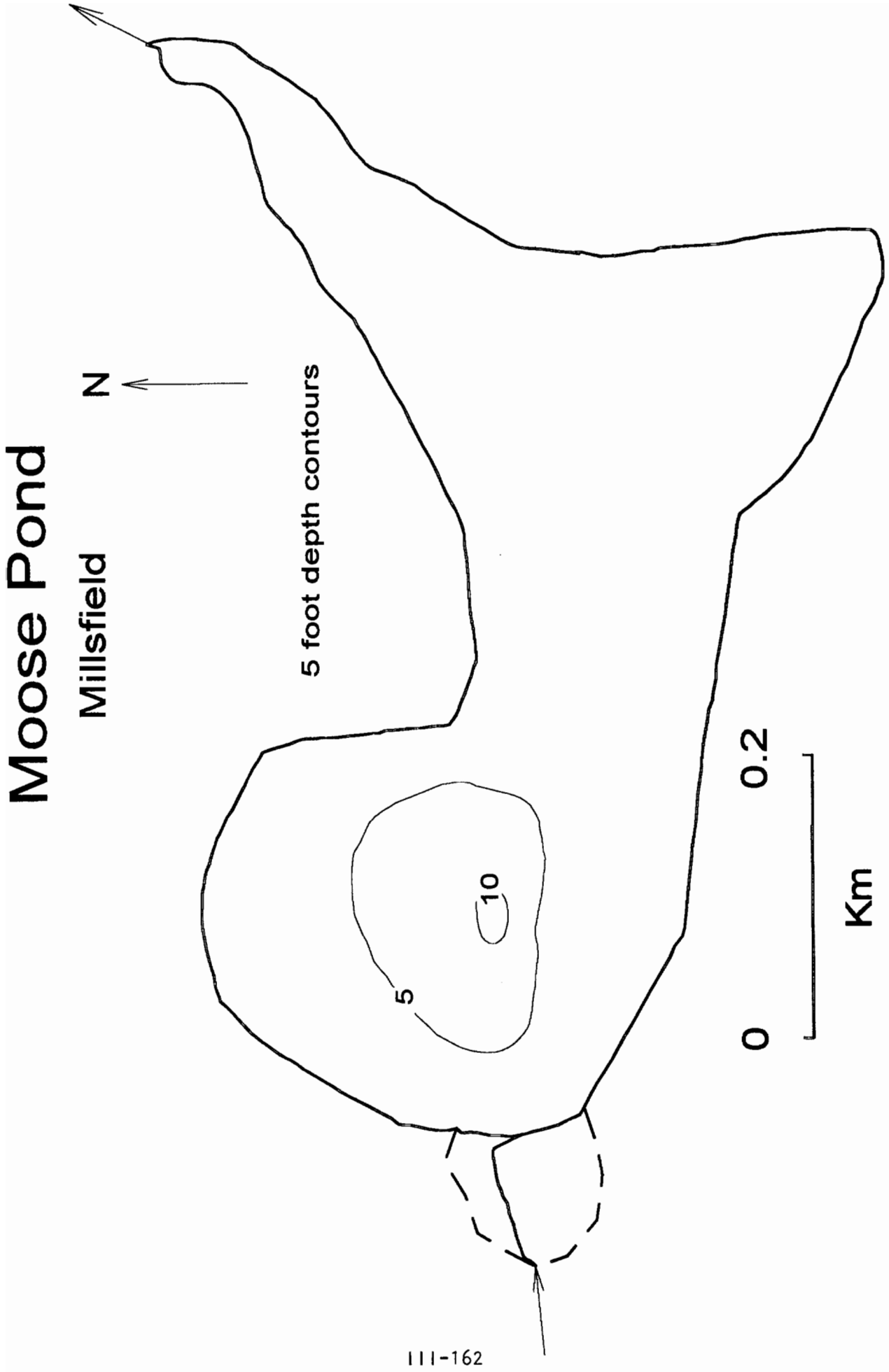
5

10

0

0.2

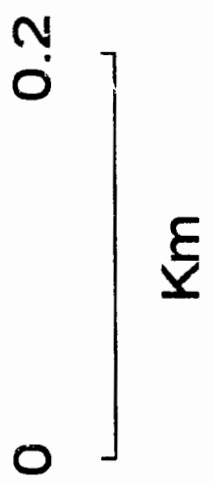
Km



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***Dissolved oxygen values are in mg/L**

Millsfield N



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